

Travel History – Reference Guide

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Summary: Travel History

Definition

Gathers data on the states (in the United States) and countries to which a person has traveled.

Data Storage and Field Values

There are 6 data elements used to define the data concept Travel History. The variable names noted below specifically apply to the travel history of the subject of the report. Variable names for other uses of Travel History, such as travel history of a contact of the subject of the report, are not discussed in this document but will be discussed in subsequent releases.

State Travel 1

Description: State/US Territory
 #1 travel history

Variable Name: STTRAV1

Type: character

Length: 2

Reported to CDC: Yes

Field Values: List of valid values
is obtained from a FIPS reference file

State Travel 2

Description: State/US Territory #2
 travel history

Variable Name: STTRAV2

Type: character

Length: 2

Reported to CDC: Yes

Field Values: List of valid values is
obtained from a FIPS reference file

State Travel 3

Description: State/US Territory
#3 travel history

Variable Name: STTRAV3

Type: character

Length: 2

Reported to CDC: Yes

Field Values: List of valid values
is obtained from a FIPS reference file

Country Travel 1

Description: Country #1 travel
history

Variable Name: CNTRYTRAV1

Type: character

Length: 45

Reported to CDC: Yes

Field Values: List of valid values
is obtained from the ISO 3166/FIPS 104
reference file

Country Travel 2

Description: Country #2
travel history

Variable Name: CNTRYTRAV2

Type: character

Length: 45

Reported to CDC: Yes

Field Values: List of valid
values is obtained from the ISO
3166/FIPS 104 reference file

Country Travel 3

Description: Country #3 travel
history

Variable Name: CNTRYTRAV3

Type: character

Length: 45

Reported to CDC: Yes

Field Values: List of valid values
is obtained from the ISO 3166/FIPS 104
reference file

Note: As described above, standards and guidelines for state data are issued as Federal Information Processing Standards (FIPS) and are available for use government-wide. The standards and guidelines for country data are available from the International Organization for Standardization (ISO), a worldwide federation of national standards bodies from some 130 countries. A separate document on FIPS-related and ISO-related reference tables is being planned, and will be available in the future.

Missing Values

If the value of any of the Travel History data elements is missing, or does not adhere to the CIPHER standard, the data element may be noted as blank to indicate a missing value. If the program requires the reason the value is missing, a separate 1-character field should be used to note the reason for the missing data. The use of a Missing Value Reason data element must adhere to the CIPHER definition and rules associated with missing data as described in Appendix I - Missing Value Reason.

Processing Overview

Special requirements apply. Refer to the Implementation subsection on Data Processing: Validations and Edit Checks, below, for detailed information.

EDI Summary

Note: EDI sections are under construction.

Discussion

The Travel History data concept is defined and structured to collect information on states and countries a person has traveled to and/or visited. Further discussion is required on data needs related to timeframe of travel.

***NOTE:** The discussion on the schema and consequent valid values for time period of Travel History was not completed in the CIPHER meetings and requires input from other groups to be finalized.* The CIPHER group had identified the need to include information on where a person has traveled (within the United States and outside the United States). Thus far, Travel History consists of data elements containing information on **where** the person has traveled. Additional discussion is required on the need to collect information on **timeframe of travel**. For example, a variable may be required for each of the 6 above-noted "places of travel" data elements to indicate when the travel occurred. An additional variable may be required for each of the 6 data elements to indicate when the most recent travel occurred, either as a formal duration or in terms of <1 week, 1-2 weeks, <1 month, <3 months, <6 months, <1 year, 1 year, 2 years, and so forth. Both information on any travel or exposure and information on recent travel can be significant, depending on the disease and the exposure situation.

Implementation: Travel History

The implementation examples noted below specifically apply to the travel history of the subject of the report. The implementation for other uses of travel history can be patterned after these implementation examples.

Data Collection: Hardcopy Report Form

Free-form entry fields on the hardcopy report form are used for the collection of Travel History data. Refer to Figures 1 and 2 below.

Figure 1: **Blank Hardcopy Form section used to collect Travel History**

<u>Travel History</u>	
States of Travel	Countries of Travel
_____	_____
_____	_____
_____	_____

Figure 2: **Completed Hardcopy Form section used to collect Travel History**

<u>Travel History</u>	
States of Travel	Countries of Travel
New York _____	France _____
Virginia _____	_____
_____	_____

Missing Values – Hardcopy Form

Examples of hardcopy forms using the associated Missing Value Reason data element can be found in Appendix I – Missing Value Reason. The hardcopy form need only contain a missing value reason if the program requires the rationale for a missing value for Travel History.

Data Entry: Electronic Forms

Pull-down menus are used to display entry options for the Travel History components, as shown in Figures 3 through 7. The valid values for a component field are dictated and controlled by externally obtained but internally maintained reference tables.

The association to reference files is performed through the system control for the Travel History data concept. The illustrations in this section represent a portion of the controls available through the Travel History system control.

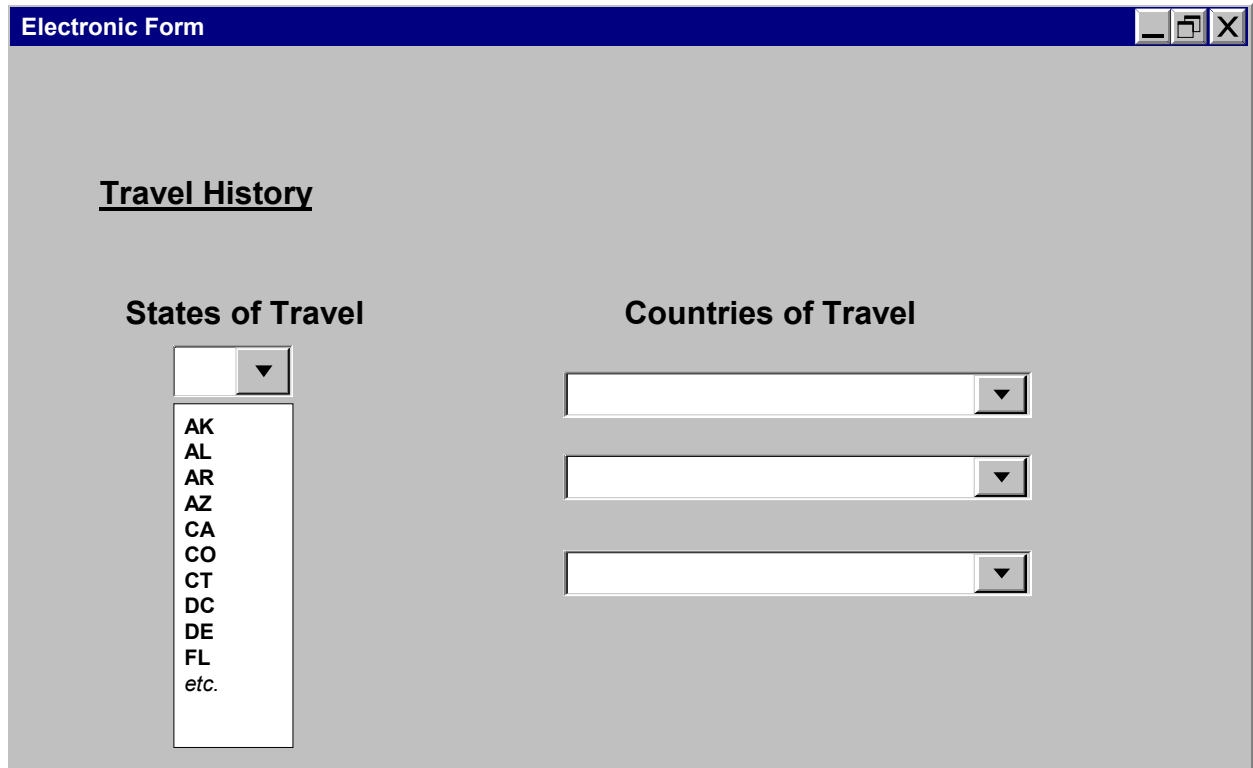
Figure 3: Blank Electronic Form used to collect Travel History

Electronic Form

Travel History

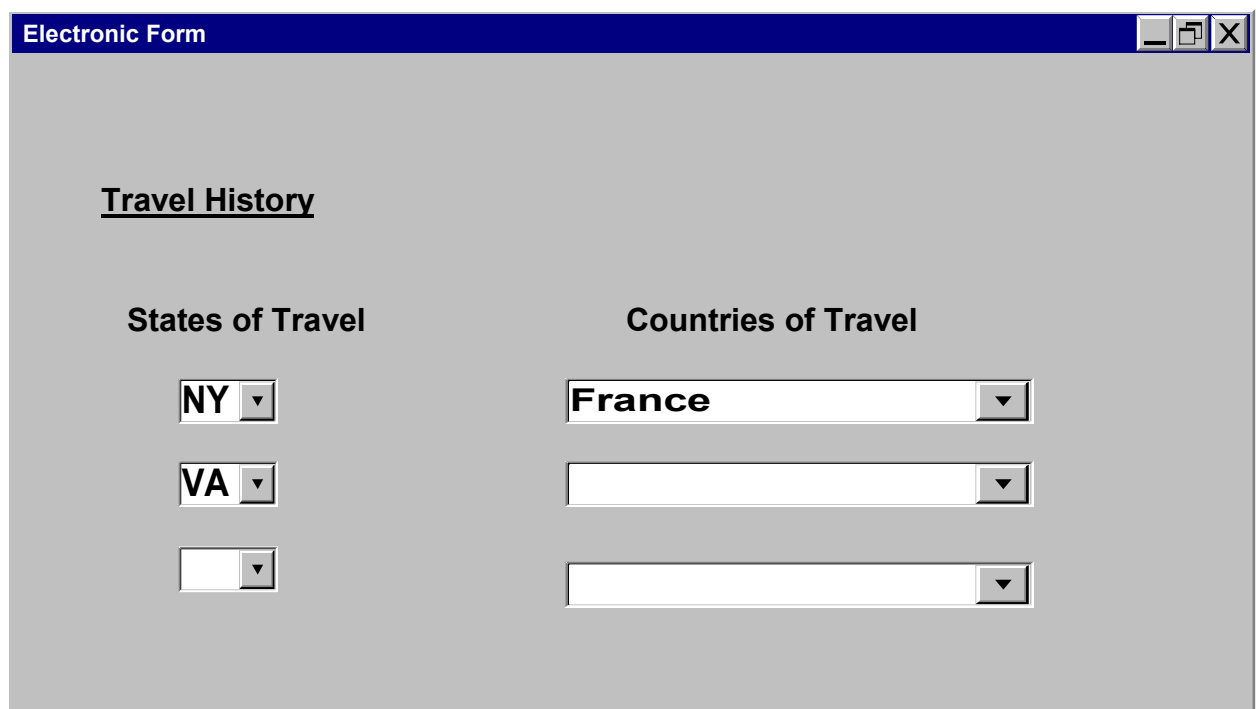
States of Travel	Countries of Travel
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Figure 4: Blank Electronic Form used to collect Travel History, pull-down menu enabled



The image shows a screenshot of a web browser window titled "Electronic Form". The page has a light gray background. At the top left, the text "Travel History" is displayed in a bold, black, sans-serif font. Below this, there are two main sections: "States of Travel" and "Countries of Travel". Under "States of Travel", there is a pull-down menu with a white background and a small gray arrow on the right. The menu is open, showing a list of US state abbreviations: AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, and etc. at the bottom. Under "Countries of Travel", there are three empty pull-down menus, each with a white background and a small gray arrow on the right.

Figure 5: Completed Electronic Form used to collect Travel History



The image shows a screenshot of a web browser window titled "Electronic Form". The page has a light gray background. At the top left, the text "Travel History" is displayed in a bold, black, sans-serif font. Below this, there are two main sections: "States of Travel" and "Countries of Travel". Under "States of Travel", there are three pull-down menus. The first two are filled with "NY" and "VA" respectively, and the third is empty. Each has a small gray arrow on the right. Under "Countries of Travel", there are three pull-down menus. The first is filled with "France", and the other two are empty. Each has a small gray arrow on the right.

Missing Values – Electronic Form

Examples of electronic forms using the associated Missing Value Reason (MVR) data element can be found in Appendix I – Missing Value Reason. The electronic form needs to handle the Missing Value Reason only if the program requires the rationale for a missing value for Travel History. If the user selects a missing value reason code during data entry, the Travel History field will be blank and the screen will display the MVR information next to the blank field.

Data Processing: Validations and Edit Checks

Data elements entered in the electronic form will be edited as outlined below. If the program elects to use an associated Missing Value Reason data element for Travel History, it will be edited as outlined in Appendix I – Missing Value Reason.

The six Travel History data elements are coupled to reference tables in which the valid values for a component field are dictated and controlled by externally obtained but internally maintained reference tables. For example, the valid values for the country component are obtained from the ISO 3166/FIPS 104 table.

Each reference table contains a set of table identifiers (*version*, *date effective*, and *date ineffective*) which are used to track and catalog the currently active/supported version of the reference table. As reference tables are modified, a "snapshot" of the previous version of the table is taken and stored before updating and replacing the table with the current version. This enables programs to access previous active versions of reference tables. Furthermore, these identifiers enable programs to track the version of the reference table that was accessed at the time the travel data were entered/stored in the record. This is advantageous in situations in which the stored travel data, based on an older reference file, have changed or are no longer supported in the current version of the reference file. In such cases, a program can enable access to the "snapshot" of the reference table data that were active and supported at the time the travel data were originally entered. (A separate document on Reference Tables is being planned, and will be available in the future.)

The above-noted Reference Tables also contain additional FIPS data including state, and country FIPS codes associated with the textual descriptions. A component (to be developed in the future) can be used during analysis to access data in the reference tables other than the textual descriptions that are stored in the CIPHER record. The textual descriptions stored in the CIPHER record serve as a link to the reference table data.

Data Processing: From Hardcopy to Storage

The following example illustrates the flow of information from data collection on the hardcopy form, to data entry into the electronic form, to validations and storage in the database.

The process begins with the blank Hardcopy data collection form used to collect Travel History:



The Travel History information is captured on the form, creating a completed Hardcopy data collection form:



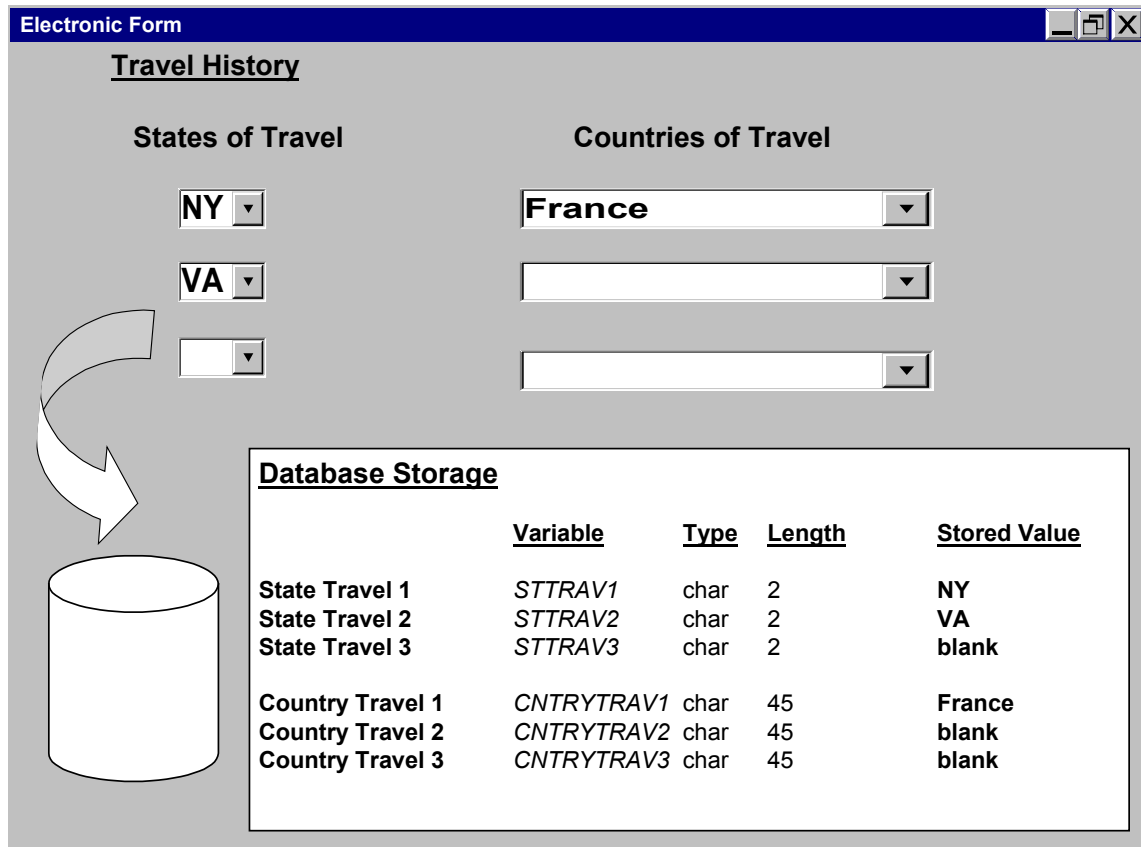
The process continues with a blank Electronic form/data entry screen used to capture Travel History:



The value from the hardcopy form is entered into the Electronic form/data entry screen with the use of drop-down lists of valid values, and then the edits and validations are performed on Travel History:



The completed Electronic form/data entry screen is redisplayed and Travel History is stored in the database:



	<u>Variable</u>	<u>Type</u>	<u>Length</u>	<u>Stored Value</u>
State Travel 1	STTRAV1	char	2	NY
State Travel 2	STTRAV2	char	2	VA
State Travel 3	STTRAV3	char	2	blank
Country Travel 1	CNTRYTRAV1	char	45	France
Country Travel 2	CNTRYTRAV2	char	45	blank
Country Travel 3	CNTRYTRAV3	char	45	blank

Data Transmission: Electronic Data Interchange

Note: EDI sections are under construction.